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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,043	02/25/2000	Philip Gilchrist	CE03599RP01	6989

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MOTOROLA, INC.
1303 EAST ALGONQUIN ROAD
IL01/3RD
SCHAUMBURG, IL 60196

EXAMINER

GEORGE, KEITH M

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/513,043

Applicant(s)

GILCHRIST ET AL.

Examiner

Keith M. George

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: Claim 4 is written as a dependent claim that depends from itself. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 11 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Perkins et al., U.S. Patent 5,442,633, hereinafter Perkins '633.
4. Referring to claim 1, Perkins '633 teaches a method for routing a packet of information between two hosts that are coupled to a network (method of routing data in a communication system). Each of the hosts have a unique network address, and at least one of the hosts is a mobile host (wherein the first remote unit is a mobile unit). Perkins '633 goes on to teach the method of communications between the two devices, including a step of transmitting a reply packet from the second host to the mobile host via the base access station (BSS) in accordance with a path reversal technique. As a result, the reply packet is directed through the network to the base access station (BSS) that serves the current physical location of the mobile host, and an optimal, fast routing of the packet is achieved without involving intermediate gateways (packet

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data gateway) (figure 2, 16 and 18) (transferring a routing function from a packet data gateway to a Base Station System without routing the data through the packet data gateway) (abstract).

5. Referring to claim 2, Perkins '633 teaches the method described in reference to claim 1 above and also teaches that by supplying the associated BAS address (BSS) in each reply NPDU, a MH (Mobile Host) informs the originator of the packet traffic about its most current network location. By using the address of the BAS recipient, the originator of the traffic is enabled, in effect, to track the most current location of the recipient of the traffic (transferring the routing function from the BSS to a second BSS) (column 9, lines 59-65). It is clear from the description that the routing will transfer from one BAS to another BAS as the MH moves from the coverage area of one BAS into another BAS.

6. Referring to claim 3, Perkins '633 teaches the method described in reference to claims 1 and 2 above where it was clearly shown that the MH (first or second remote unit) informs the originator of the packet traffic about its most current location. It is clear that the MH is requesting the transfer of the routing function.

7. Referring to claim 4, Perkins '633 teaches the method described in reference to claims 1 and 2 above where it was clearly shown that the transfer of routing function occurs when the MH moves from the coverage area of one BAS into another BAS (reselection of a cell).

8. Referring to claim 6, Perkins '633 teaches the method described in reference to claim 1 above and also teaches that when a MH moves from one Level 2 subnetwork to another (moved outside of the local area), while communicating with another host, the first NPDU sent to the MH would go through the MR (Packet Data Gateway) that acts as the proxy for the MH (column 9, lines 21-25).

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9. Referring to claim 11, Perkins '633 teaches the method described in reference to claims 1-4 above where it has been clearly shown that the identity of the originator (second remote unit) is known, otherwise it would not be possible to inform the originator of the current location of the MH (first remote unit).

10. Referring to claim 12, Perkins '633 teaches the method described in reference to claim 1 above and also clearly teaches that as a MH (first remote unit) moves between different Level 2 subnetworks, the MR that is currently acting as a proxy for the MH is informed of the MHs location (context), via the BAS (base station receiving uplink information from a first remote unit). Perkins '633 goes on to teach that a reply packet is directed through the network to the base access station (BSS) that serves the current physical location of the mobile host, and an optimal, fast routing of the packet is achieved without involving intermediate gateways (bypasses network elements external to the local network).

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins '633. Perkins '633 teaches the method described in reference to claim 1 above but possibly fails to specifically disclose transmitting billing and statistics from BSS to the packet data gateway. Perkins '633 discloses that control information is transmitted between the BSS and packet data gateway. Official notice is taken that transmission of billing and statistical information between network elements in a telecommunication system is notoriously old and well known. Therefore,

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it would have been obvious to an ordinary person skilled in the art at the time of the invention to include transmission of billing and statistics with the method of Perkins '633 in order for recover the cost of the usage and make a profit on the network.

13. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins '633 in view of Perkins, U.S. Patent 5,159,592, hereinafter Perkins '592. Perkins '633 teaches the method described in reference to claim 1 above with the possible exception of returning the routing function from the BSS to the Packet Data Gateway based on a request from the Packet Data Gateway, based on a context modification or based on a length of inactivity of the first remote unit. Perkins '592 teaches that being out of touch (context modification and length of inactivity) for a predetermined time causes the mobile unit's local gateway to notify the global gateway that the mobile unit is not longer a member of the group. In response to being notified of the disappearance of the mobile unit, the global gateway terminates the forwarding of packets that are direct to the inactive mobile unit (based on a request from the Packet Data Gateway) (column 5, lines 34-42). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the "out of touch" scenario taught by Perkins '592 in the method of routing a packet in a communication network taught by Perkins '633. One of ordinary skill in the art would have been motivated to do this because Perkins '633 states that the gateway may include components for maintaining and allocating pseudo-IP addresses to the MHs as described in the commonly assigned U.S. Patent application Ser. No. 07/605,592 (now U.S. Patent 5,192,592) (column 5, lines 29-33).

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins '633 in view of Kimball, U.S. Patent 5,953,322, hereinafter Kimball. Perkins '633 teaches the method

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described in reference to claim 1 above with the possible exception of providing interconnection to a circuit switched network. Kimball teaches that voice call data packets are recovered according to the protocol of the PSTN which is a circuit switched network (a packet data communication can be converted to a PSTN call and interconnected to a circuit switched network) (column 5, lines 6-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to include providing interconnection to a circuit switched network as taught by Kimball with the method of Perkins '633 in order to increase scalability of the system by allowing the user to communicate of users on the different networks.

Response to Arguments

15. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 703-305-6531. The examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Keith M. George
10 December 2003



CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 12/11/03